

REMARKS

Claims 4 and 35 have been amended, Claims 45, 47, 49, 51, 53 and 55 by this amendment and Claim 3 and 24 by the previous amendment have been cancelled and Claims 1-2, 5-33, and 36-56 have been allowed. Thus, claims 1, 2, 4-33, 35-44, 46, 48, 50, 52, 54, 56, 92, and 93 are pending in this application. For at least the following reasons, it is respectfully submitted that this application is in condition for allowance.

In the Action, Claim 4 was rejected under 35 USC 112 because there is insufficient antecedent basis for this limitation in Claim 4. Since claim 4 has been amended, Applicant believes that the rejection under 35 U.S.C. 112 is no longer applicable, and respectfully requests the rejection under 35 U.S.C. 112 is withdrawn.

In the Action, Claims 4, 35, 92, and 93 are rejected under 35 U.S.C. 103 (a) as being anticipated by Miyajima. The invention defined in independent claims 4 or 35 relates to a sealing apparatus for sealing a semiconductor wafer having semiconductor elements on its surface by resin, or a semiconductor device manufacturing mold for setting a semiconductor wafer having semiconductor elements on its surface in order to seal the surface by resin. The characteristic of the invention claimed in claims 4 or 35 is,

(a) a lower mold having area where the semiconductor wafer is to be mounted directly, the lower mold having an uneven surface in the area

(b) wherein the uneven surface has a roughness in a range between $8\mu\text{m}$ and $12\mu\text{m}$

According to the invention, since the semiconductor wafer is directly placed in the area of the lower mold, the uneven surface, which has a roughness in a range between $8\mu\text{m}$ and $12\mu\text{m}$, is formed on the surface of the lower mold. According to these characteristics, it is possible to avoid making scratches on the surface of the semiconductor wafer. Further, when the semiconductor wafer is removed from the mold, it is possible to avoid adhering the semiconductor wafer to the mold. Thus, the uneven surface having a roughness in a range between $8\mu\text{m}$ and $12\mu\text{m}$ prevents the mold from making a crack on the semiconductor wafer because the semiconductor wafer can be easily removed from the mold.

As the examiner admitted, although Miyajima discloses the fine projection, the size of the fine projection is not disclosed. According to Miyajima, a release film is inserted between a semiconductor film and a cavity. The purpose of forming the fine projection at the bottom of the cavity in Miyajima is to set the release film in the desired position. Thus, in Miyajima, a semiconductor wafer is not mounted on the cavity directly. As described above, the purpose of the uneven surfaces between Miyajima and the present invention is quite different, Miyajima can set the roughness in any range, and Miyajima cannot suggest any size of the fine projection. The examiner asserts that it would have been obvious to one of ordinary skill in the art. However, as described above, the purpose of forming uneven surface is difference therebetween, a limitation as to the size of the uneven surface would NOT be obvious to one of ordinary skill in the art.

Therefore, since Miyajima does not disclose or suggest the claimed sealing apparatus having the characteristics (a) and (b) described above, claims 4 and 35 clearly are not obvious by Miyajima, and is deemed to be clearly patentable over Miyajima, and the rejection of claims 4 and 35 accordingly should be withdrawn.

Further, claims 92 and 93 depend from claim 4 or claim 35 directly. Since Applicants believes that claims 4 and 35 includes a patentable subject matter, the rejection of claims 92 and 93 depended from claim 4 or claim 35 should be withdrawn.

In view of the foregoing, the application is deemed to be in condition for allowance and such is earnestly solicited. Should any fee be needed, please charge it to our Account No. 50-0945 and notify us accordingly.

Respectfully submitted,



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